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ABSTRACT

This report is an evaluation of a New York City school district educational project funded under Title VIB Education of the Handicapped Act. Under the direction of a project coordinator and a music therapist, 365 emotionally disturbed, hyperactive, and mentally retarded youngsters, ranging in age from 6 to 15, participated in the program. Primary emphasis was placed on improving the visual motor, visual auditory, and perceptual motor coordination of these youngsters through music activities. A nineteen item rating scale performance test was developed by the project staff as an assessment measure and was administered in pre and posttest situations. A statistical analysis of the data revealed significant differences in the scores. It was concluded that students made gains in the affective, cognitive and psychomotor domains as a result of the music instruction they received. (Author/BS)

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ED137459

EVALUATION REPORT==========

Function No.
B/E #09-56612

MUSIC FOR THE HANDICAPPED

EVALUATION PERIOD
SCHOOL YEAR 1974-1975

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U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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UD016840

An evaluation of a New York City School District educational project funded under Title VIB Education of the Handicapped Act and performed for the Board of Education of the City of New York for the 1974-75 school year.

Dr. Anthony J. Polemeni, Director

BOARD OF EDUCATION OF THE CITY OF NEW YORK
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THE PROGRAM

The Music for the Handicapped Program otherwise known as Music Therapy Program was in its third and a half year of operation in 1974-75. It was implemented in District 21, Brooklyn from the 1971-72 school year until September 1974. The schools serviced by this program were the Resource Center P.S. 226 with two satellite schools, P.S. 212 and J.H.S. 239 and the Resource Center P.S. 238 with two satellite schools, P.S. 303 and P.S. 90.

Beginning in September 1974, only 50% of the funds for operating the program were provided by the federal grant. In view of the fact that District 21 was unable to supply the additional 50% funding necessary for the program to continue, the federally-funded program was housed in District 1(Brooklyn. The schools serviced at District 16 by this program were the Resource Center P.S. 335 with two satellite schools, P.S. 21 and P.S. 83.

Demographic Characteristics of the Participants

In order to accomodate all the 365 Special Education pupils in the Music Therapy Program, the music therapist offered two five-month sessions at P.S. 335 and P.S. 83, and a ten-month session at P.S. 21. Records on the total school enrollment and the number of Special Education pupil enrollment indicated that 18% (192) of 1048 pupils were in Special Education classes at P.S. 335, that 6.4% (48) of 737 pupils were in Special Education classes at P.S. 21, and that 93% (143) of 159 pupils were in Special Education classes at P.S. 83.

From September 1974 to January 1975, there were 73 EMR (educable mentally retarded) children ranging from 6 to 14 years old and 28 TMR (trainable mentally retarded) children ranging from 8 to 12 years old who received music instruction in nine classes at P.S. 335. There were 73

children who were emotionally disturbed, hyperactive, and had perceptual problems and receiving instruction in six classes at P.S. 83.

From February to June 1975, there were 28 EMR pupils ranging from 9 to 12 years old, 30 TMR pupils ranging from 10 to 14 years old, and 33 brain injured, emotionally disturbed and hyperactive pupils ranging from 8 to 12 years old who received music instruction in eight classes at P.S. 335. There were 70 children who were emotionally disturbed, hyperactive and had perceptual problems receiving music instruction in six classes at P.S. 83.

From September 1974 to June 1975, there were 27 EMR (educable mentally retarded) children ranging from 7 to 14 years old, and 22 TMR (trainable mentally retarded) participants ranging from 8 to 11 years old in four classes at P.S. 21 and 28 EMR participants ranging from 9 to 12 years old at P.S. 335.

The Staff

The music therapist who did undergraduate work in music education and graduate work in music therapy provided forty-minute instructional sessions at P.S. 335, P.S. 83, and P.S. 21 of District #16. The music therapist taught five classes on Mondays and Fridays, taught three classes on Wednesdays, gave individual instruction on Wednesday, and conferred with teachers on Mondays at P.S. 335. The music therapist provided instructional activities to two trainable mentally retarded classes and two educable retarded classes on Tuesday and Thursday mornings at P.S. 21. The music therapist met with three emotionally disturbed and hyperactive classes on Tuesday afternoon; and with one group of children with perceptual problems and emotionally disturbed and hyperactive classes on Thursday.

The Assistant Director of the Music Bureau, who was also the Project Coordinator, met with the staff on Wednesday afternoons for seminars geared to the development of teaching techniques, implementation of techniques,

evaluation of pupil progress, and demonstration lessons. The Assistant Director coordinated the Program in the areas of scheduling, curriculum content, teaching techniques, personnel, and other areas appropriate to the implementation of the program objectives.

Instructional Activities

At the end of the school year 1974-75, it was anticipated that the participating children would have received the following curriculum training and instruction relevant to the attainment of the following objectives:

Objective	Type of Instruction
. motor development	Musical instrument instruction using the keyboard, recorder and various rhythm instruments.
. aural perception	Listening experiences, ear training, pitch perception of various musical instruments.
. visual perception	Music reading, composing music, sight reading and singing (Kodaly hand signals).
. physical coordination	Percussion training using rhythm instruments, movement activities, movement songs, creative movement, improvisation, playing musical instruments.
. voice (placement, diction, timbre)	Vocal skills developed through vocalizing, solamization and song repitoire, breath control.

Improved visual-motor, visual-auditory, and perceptual-motor coordination were expected to be developed (1) by playing musical instruments, i.e., Tempo guitars, Wurlitzer Mobile Learning Center, Orff-type instruments kit, Hohner German finger recorder, drum, maraccas, claves and (2) by being involved in various musical activities, i.e., breathing exercises on the recorder for the purpose of improving breath control in singing and improving ability to sustain tones; listening to the rhythm machine, piano, guitar for different levels of sound; singing songs with repeating melody; marching, jumping, skipping, playing the piano,

strumming and plucking a guitar to a rhythm line to establish a basic beat.

EVALUATIVE PROCEDURES

Two cycles of five-month period of instructions were geared to reading rhythmic notations, improvising rhythms, learning to repeat rhythms, recordings, listening to musical repertoire, reading music, and developing vocal skills, aural discriminations, finger dexterity, coordination of eye, ear, and motor functions.

Evaluation Objectives

The objectives of evaluation stem directly from the program objectives.

Objective #1: To determine whether or not at the conclusion of the program 70% of the pupils would have demonstrated improved visual-motor, visual-auditory, and perceptual-motor coordination through the playing of musical instruments and other musical activities as indicated by pre-post test ratings. These children would have:

. demonstrated vocal techniques (breath control, dynamics, pitch matching, sustaining tones).

. demonstrated the ability to read simple rhythmic notation and melodic notations.

. demonstrated the ability to compose single melodies.

. demonstrated the facility in playing classroom percussion instruments, keyboard, and guitar.

. demonstrated the ability to recognize and identify musical notations (melodic and rhythmic), and

. recognized the musical qualities of most brass, percussion, string, and woodwinds.

Objective #2: To determine (a) whether or not the children of Special Education classes integrated with the total school population through music (e.g., festivals, concerts, assembly programs, attendance at concerts) and (b) whether 20% of the Special Education classes integrated into the on-going music programs in the school or district as determined by teachers and administrator reports.

Objective #3: To determine the extent to which the Program as actually carried out coincided with the program as described in the Project Proposal.

Evaluation Instruments

A nineteen-item (1 to 4) rating scale performance test was developed by the project staff to measure motor development, aural perception, visual perception, physical coordination and vocal skills. Six of these items measured voice control, four of these items measured the ability to read simple rhythmic and melodic notation, two items measured the ability to compose simple melodies, five items measured facility in playing percussion instruments, and two items measured the ability to recognize and identify musical notation (Appendix C).

Records were maintained on the number of total school enrollment and number of Special Education pupil enrollment. The number of Special Education children attending festivals, concerts, music assembly programs and participating in on-going music programs at P.S. 335, P.S. 83, and P.S. 21 were not recorded.

A comparative descriptive analysis was considered in determining the discrepancy between Project proposal and Project implementation in the following seven major categories: target population; curriculum; instructional schedule and types of instructional activities; personnel responsibilities; integration of the program in on-going music programs within each of the schools; dissemination activities; and school-home relations.

Sampling Procedures

All the Special Education pupils attending the Music Resource Center, P.S. 335, and the two satellite schools, P.S. 21 and P.S. 83, were given music instruction from September 1974 to June 1975. The children in

P.S. 335 and 83 received five months of music instruction. The children in P.S. 21 and two classes at P.S. 335 received ten months of music instruction.

Data Collection

A pre-test during the week of October 7, 1974, and a post-test during the week of January 27, 1975, were administered to 44 children at P.S. 335, to 49 children at P.S. 83, and to 47 children at P.S. 21 - a total of 140 children. A pre-test during the week of February 3, 1975, and a post-test during the week of May 26, 1975, were administered to 76 children at P.S. 335, and 69 children at P.S. 83, and 48 children at P.S. 21 - a total of 193 children (Appendix B).

There were half-day school visitations on April 10, 1975, at the satellite schools, P.S. 83 and P.S. 21, and a whole-day school visitation on April 16, 1975, at the Resource Center, P.S. 335. Information about the various activities and about responsibilities of the staff were gathered through interviews and conferences on December 10, 1974, and March 18, 1975. A cursory review of the evaluation reports, B/E 09-36611, for the school year 1972-73 and B/E 09-46612 for Spring semester of 1974 gave insights on recommendations of previous evaluations.

Methods of Data Treatment

It was established that the first objective would be assessed by teacher ratings, on a four-point scale, measuring the extent to which the pupils who received music instruction improved in each of the skill areas: voice control, and ability to identify notation, to play percussion instruments, to compose simple melodies, and to read rhythmic and melodic notations. Improvement in these areas is reported in number and percentage of pupils showing improvement. One-tailed McNemar's Test of Significance of Changes was used to test the effectiveness of the treatment.

The second objective could not be evaluated. There were no attendance statistics available. The third objective was evaluated within the framework of conferences, interviews, visitations, and perusal of the Proposal.

Limitations Imposed on Evaluation Procedures

It should be noted that the pupils at P.S. 335 and P.S. 83 received music instructions forty-five minutes once a week for a period of five months. However, the pupils at P.S. 21 and two classes at P.S. 335 received music instructions forty-five minutes once a week within a ten-month period. These adjustments were made to accomodate Program changes in participating schools.

The staff-developed nineteen-item four-point rating scale does not include items to assess the ability "to recognize the musical qualities of most brass, percussion, string and woodwind instruments." The staff felt that the participating pupils would not be able to develop the aforementioned. It should also be noted that some trainable mentally retarded brain injured and emotionally disturbed children found difficulty in being tested in some or all of the items in the rating scale. Only 63% (140) of 223 participating pupils were tested during the week of January 27, 1975, and only 90% (193) of 210 participating pupils were tested during the week of May 27, 1975. Records were unavailable at the three schools on the number of Special Education children who attended or participated in "on-going" programs.

FINDINGS

The specific observations at the various schools and perceptions on the implementation of the Program are reflected in the statements in this section and in Appendices A to D.

Program Observations and Findings

The first evaluation objective stated, "At the conclusion of the program, 70% of the students will demonstrate improved visual-motor, visual-auditory, and perceptual-motor coordination through playing of musical instruments and other musical activities".

Table 1 indicates that the pupils who received music instruction from September 1974 to January 1975 demonstrated 65% improvement in visual-motor, visual-auditory, and perceptual-motor abilities. The pupils at P.S. 83 demonstrated 85% improvement; the pupils at P.S. 335 demonstrated 66% improvement; and, the pupils at P.S. 21 demonstrated 43% improvement in visual-motor, visual-auditory, and perceptual-motor abilities. The pupils who received music instruction from February to June 1975 demonstrated 63% improvement in visual-motor, visual-auditory, and perceptual-motor improvement abilities. The pupils at P.S. 83 demonstrated 63% of improvement, and the pupils at P.S. 335 demonstrated 63% improvement. It should be noted that the 48 pupils at P.S. 21 and 19 pupils at P.S. 335 who had continuing music instruction from September 1974 to June 1975 demonstrated 88% improvement.

McNemar's Test of Significance of Changes as shown in Table 2 indicated that the one-tailed tests were significant ($P < .005$).

The second evaluation objective stated, "To integrate the children of the Special Education classes with the total school population through music and to integrate 20% of these children into the on-going music programs in the school or district". In view of the fact that the Special Education pupils had limited participation in music activities and had limited integration into the on-going music programs in the school, the second evaluation objective was minimally achieved. The satellite schools had Open House sessions for parents during the Music in Our Schools Day.

Comparison of Numbers and Percentages in Distribution of Positive Changes in Improved Visual-Motor, Visual-Auditory, and Perceptual-Motor Abilities of Children Who Received Music Instruction at P.S. 335, P.S. 83, and P.S. 21, Brooklyn, 1974-75

Table 1

	P.S. 335		P.S. 83		P.S. 21 **		Total	
	N	%	N	%	N	%	N	%
September 1974 to January 1975 Demonstrated Abilities:								
. Voice Control	18(44)	41	36(49)	73	23(46)	50	77(139)	55
. Read rhythmic & melodic notations	37(44)	84	41(49)	84	17(41)	36	95(130)	68
. Compose simple melodies	32(44)	73	43(49)	88	14(39)	36	89(132)	67
. Play percussion instruments	22(44)	50	39(49)	80	21(47)	45	82(140)	59
. Identify musical notations	37(44)	84	48(49)	98	23(47)	49	108(140)	77
Composite		66%		85%		43%		65%
February 1975 to June 1975 Demonstrated Abilities:								
. Voice Control	27(57)	47	28(69)	41	50(67)	75	55(126)	44
. Read rhythmic & melodic notations	42(57)	74	50(69)	72	64(67)	96	92(126)	73
. Compose simple melodies	40(57)	70	49(69)	71	59(67)	88	89(126)	71
. Play percussion instruments	37(57)	65	42(69)	61	58(67)	87	79(126)	63
. Identify musical notations	33(57)	58	49(69)	71	63(67)	94	82(126)	65
Composite (excludes **)		63%		63%		**88%		63%

Note: The numbers enclosed in parenthesis indicate the number of respondents to the items in the assessment instrument.

** Participating students at P.S. 21 received continuing music instruction from September 1974 to June 1975. The figures for February to June 1975 include 19 participating pupils in two educable classes at P.S. 335 who received continuing music instruction from September 1974 to June 1975.

Table 2

McNemar's One-Tailed Test of Significance of Changes Concerning Achievement of Objectives by Pupils in Music for Handicapped Program at P.S. 335, P.S. 83, and P.S. 21, Brooklyn, 1974-75

	Number of Pupils		One-Tailed Test McNemar Test	
	Positive Change	Negative Change	X^2 values	Hi:P
September '74 to January '75				
Demonstrated Abilities:				
. Voice Control	77	0	75.01	.005
. Read rhythmic & melodic notations	95	0	93.01	.005
. Compose simple melodies	89	0	87.01	.005
. Play percussion instruments	82	0	80.01	.005
. Identify musical notations	108	0	101.00	.005
February '75 to June '75				
Demonstrated Abilities:				
. Voice Control	55	0	53.01	.005
. Read rhythmic & melodic notations	92	0	90.01	.005
. Compose simple melodies	89	0	87.01	.005
. Play percussion instruments	79	0	77.01	.005
. Identify musical notations	82	0	80.01	.005
September '74 to June '75 (P.S. 21 & P.S. 335) **				
Demonstrated Abilities:				
. Voice Control	50	0	48.02	.005
. Read rhythmic & melodic notations	64	0	62.01	.005
. Compose simple melodies	59	0	57.01	.005
. Play percussion instruments	58	0	56.01	.005
. Identify musical notations	63	0	61.01	.005

* Codes in the Assessment Instrument:
Negative (-): never, seldom
Positive (+): sometimes, always

** This includes 48 participating students at P.S. 21 and 19 participating students at P.S. 335 who received continuing music instruction from September 1974 to June 1975.

There were special class participation in the Christmas Concert and Music in Our Schools Day assembly at the Resource Center. Selected Special Educatio children from the three schools participated in the Spring Dissemination Conference of the Board of Education at Fordham University, Lincoln Center Campus

On-site visits, conferences, and interviews at the Resource Center and satellite schools revealed the following program strengths:

. The pupils were very enthusiastic, receptive and involved in the activities. Some parents expressed appreciation for their childrens' accomplishments.

. The extremely competent and creative music specialist who is a music therapist and a music educator by training, had good working relationship with the teachers and the children.

. Various teaching strategies developing childrens' cognitive, affective and psychomotor awareness permeated classroom activities using adequate materials and facilities.

. Rhythm instruments were used to develop fundamental motor responses. Instructions included reading rhythm notation, improvising rhythms, and learning to repeat rhythms. Recordings were used to develop aural perceptions, listening disciplines, concepts of form and exposure to music repertoire. Keyboards were used to develop critical motor development, reading of music, development of vocal skill, aural discrimination, finger dexterity, coordination of one eye, ear, and motor functions.

. The Special Education classroom teachers attending the music classes with their pupils, reinforced learning through actual involvement and participation in the activities and followed these activities through during the week.

. The Coordinator of the project, extremely committed and very supportiv of the staff and the project, encouraged sharing effective teaching techniques and on-going staff evaluation (Appendix D).

The third evaluation objective was "To determine the extent to which the program, as actually carried out, coincided with the program as described in the Project Proposal".

The Proposal designated a target population of 313 children enrolled in Special Education classes at District 21 - P.S. 238, 226, 90, 303, 212, and J.H.S. 239. Actually, in the implementation of the Program, there were 365 participating children enrolled in Special Education classes at District 16 - P.S. 335, P.S. 83, and P.S. 21. No other district programs were cross-referenced to nor had any impact on this project. In view of the change in the target population, there were subsequent changes in the curriculum, instructional schedules, types of instructional activities, personnel responsibilities, dissemination activities, and integration of the Program in on-going school music programs. Specifically, within the context of P.S. 335 as the Resource Center and P.S. 83 and P.S. 21 as satellite schools, the deviations of the Implemented Program from the Proposal were the following:

. Instruction in aural perception was minimized, there was no opportunit for the children to demonstrate the ability to recognize the musical qualities of most brass, percussion, string, and woodwind instruments. The participating children did not have the ability to meet this objective.

. In lieu of the proposed ten-month music instruction, two hours per week for all children in Special Education classes, only a forty-five minute class a week of class instructions were received for five months by the children at P.S. 335 and 83. The children at P.S. 21 and 335 (2 classes) received forty-five minute a week class instruction for ten months.

. Participating students were not tape-recorded in performing skills during the pre-test, nor were they taped every two to three months for comparative studies for post-test assessment as stated in the Proposal. However, post-tests were tape-recorded at the end of the school year.

. Instead of two music therapists only one handled music instruction.

. The music therapist provided individual and small-group instruction and met classes three days a week instead of four days a week at the Resource Center and one day a week at satellite schools as stated in the

Proposal. There were two days and a half-day class schedules at the Resource Center and two half-days a week at each of the satellite schools.

. Establishment of norms in conjunction with the Bureau of Children with Retarded Mental Development had been deferred.

. Children in Special Education classes at P.S. 335, P.S. 83, and P.S. 21 had not been integrated with the total school population in musical activities nor in on-going music programs.

. The program did not have coverage in six periodicals as stated in the Proposal. The program had coverage only in Learning in New York and Special State and Federal Programs. Other dissemination activities implemented in the program were Open House sessions and demonstration lessons.

. Parental involvement was centered around Music in Our Schools Day instead of on-going year-round activities.

Program Implementations Based on Prior Recommendations

The 1972-73 and Spring 1974 evaluation reports recommended that the Program be recycled, that several concepts be sharpened in order to permit testing of program effectiveness, and that integration of Special Education classes in on-going music programs seemed unrealistic. It was noted that the nineteen-item four-point rating scale used in 1974-75 is a refined version of the twenty-item five-point rating scale used in 1972-73, and that attendance and participation in on-going music programs at the Spring 1974 Resource Center and satellite schools were minimal.

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The project in operation revealed that Special Education children ranging from 6 to 14 years of age who received music instruction forty minutes a week from September 1974 to January 1975 and that Special Education children ranging from 8 to 15 years of age who received music instruction forty minutes a week from February to June 1975 profited from

music instruction. Within the framework of the evaluation objectives, the following were evident:

1. An analysis of teacher rating scales indicated that at least 65% of the pupils who received instruction from September 1974 to January 1975, that 63% of the pupils who received instruction from February to June 1975, and that 88% of pupils who received instruction from September 1974 to June 1975 showed improvement in five skill areas: vocal control, and ability to read simple rhythmic notation and melodic notation, to compose simple melodies, to play classroom percussion instruments, and to recognize and identify musical notation. One-tailed McNemar's Test of Significance of Changes indicated that these results were highly significant ($P < .005$).

2. Special Education pupils participated only in the Christmas Concert, Music in Our Schools Day Assembly and the Spring Dissemination Conference of the Board of Education at Fordham University. Attendance and participation in on-going music programs were not an all-year involvement.

3. In view of the change of the target population there were subsequent deviations of the implementation from the Proposal, i.e., instruction in aural perception was eliminated; only five-month forty-five minutes music instructions were received at P.S. 335 and P.S. 83; a ten-month forty-five minute music instruction was received at P.S. 21 and 335; participating students were tape-recorded only during the second post-test; the music therapist provided individual and small-group instruction once a week at the Resource Center; school-home relations was not an all-year-round involvement; and the Program had coverage only in Learning in New York and Special State and Federal Programs.

Strengths of the project as assessed through on-site observations, interviews, and conferences included pupil enthusiasm and parental support; creative teaching strategies aimed to develop affective, cognitive, and psychomotor skills for visual-motor, visual-auditory, and perceptual-motor improvement; learning activities geared to the abilities, interests, and needs of the participants; adequacy of instructional materials and facilities; Special Education teachers' reinforcement of learning activities;

involvement of a well-qualified and competent Music Therapist, and the Project Coordinator's strong commitment to and support of the Program.

On the basis of the findings, it is strongly recommended that the project be recycled for Special Education classes in selected participating schools especially imbued with positive attitudes toward integration of children through attendance at music festivals, concerts, and assembly programs and participation in on-going music programs, and that video tapes of performances of before-and-after sequential music therapy sessions be disseminated on a loan basis to interested agencies and institutions for study and consideration of the potential of "Music for the Handicapped" as a self-sustained, continuous program in Special Education.

Component Code 63561
Activity Code 720 & 724
Objective Code 812

EXEMPLARY PROGRAM ABSTRACT

The Music for the Handicapped project which was planned and recommended for funding by the Advisory Council on Funded Programs for the Handicapped of the Division of Special Education was designed to accomodate 313 children in District 21. In view of the fact that District 21 was unable to supply the additional 50% of the funding necessary for the Program to continue, the Program was housed at District 16, Resource Center, P.S. 335, and satellite schools, P.S. 83 and P.S. 21.

In order to accomodate all the 365 Special Education children, the Music Therapist gave five-month forty minute instructions a week to 145 children at P.S. 335 and 143 children at P.S. 83 and gave ten-month forty minute instructions a week to 49 children at P.S. 21 and 28 children at P.S. 335. As a result of the participation in the program from September 1974 to January 1975, 65% demonstrated improvements; from February to June 1975, 63% demonstrated improvement; and from September 1974 to June 1975, 88% demonstrated improvement in visual-motor, visual-auditory, and perceptual-motor abilities. One-tailed McNemar's Tests of Significance of Changes were significant at $P < .005$.

The Special Education children's attendance and participation in on-going music programs were limited only to the Music in Our Schools Day, School Christmas Concert, and the Spring Dissemination Conference of the Board of Education at Fordham University, Lincoln Center Campus. In view of the change of the target population, there were subsequent changes in the curriculum, instructional schedules, types of instructional activities, dissemination activities, and integration of the Program in on-going school music programs.

Strengths of the project as assessed through on-site observations, interviews, and conferences included pupil enthusiasm and parental support; creative teaching strategies aimed to develop affective, cognitive, and psychomotor skills for visual-motor, visual-auditory, and perceptual-motor improvement; learning activities geared to the abilities, interests, and needs of the participants; adequacy of instructional materials and facilities; Special Education teachers' reinforcement of learning activities; involvement of a well-qualified and competent Music Therapist, and the Project Coordinator's strong commitment to and support of the Program.

Appendix A

Measures of Growth Other Than Standardized Tests

30D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 30A, B or C, use any combination of items and report on separate pages. Attach additional pages if necessary.

Component Code	Activity Code	Objective Code
53561	720 & 724	812

52

Brief Description: A teacher four-point rating scale ranging from "never" through "always" was used to assess pupil improvement in motor development, aural perception, visual perception, physical coordination and voice control.

Number of cases observed: 140 + 193 Number of cases in treatment: 365

Pretreatment index of behavior (Specify scale used): Formal pre-assessment was made in each of the five areas: voice control, ability to read rhythmic and melodic notation, to compose simple emlodies, to play percussion instruments and to identify musical notations. Formal taped post-assessment was made after five months of music instruction. Scales ranged from "never" to "seldom" to "sometimes" and to "always".

Criterion of success: McNemar's Test of Significance of Changes

Was objective fully met? Yes [X] No [ ] If yes, by what criteria do you know? See Tables 1 and 2

Comments: In addition to reporting the number and percentage of subjects as to the degree of improvement in each of the skill areas, McNemar's Test of Significance was used to test the effectiveness of the treatment.

OFFICE OF EDUCATIONAL EVALUATION - DATA LOSS FORM
(attach to MIR, item #30) Function #BE 09-56612

In this table enter all Data Loss information. Between MIR, item #30 and this form, all participants in each activity must be accounted for. The component and activity codes used in completion of item #30 should be used here so that the two tables match. See definitions below table for further instructions.

Component Code	Activity Code	(1) Group I.D.	(2) Test Used	(3) Total N	(4) Number Tested/ Analyzed	(5) Participants Not Tested/ Analyzed		Reasons why students were not tested, or if tested, were not analyzed	
						N	%	Program Participants: Handicapped Children	Number/ Reason
63561	772 204	18	Staff Devel.						
		P.S. 335	Jan.75	101	44	57	56	absences; inability to take tests	57
			May 75	91	76	15	16	absences; inability to take tests	15
		P.S. 83	Jan.75	73	49	24	33	absences; inability to take tests	24
			May 75	70	69	1	01	absences; inability to take tests	1
		P.S. 21	Jan.75	49	47	2	04	inability to answer items & take the test	2
			May 75	49	48	1	02	absence; inability to take the test	1

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.
(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.).
(3) Number of participants in the activity.
(4) Number of participants included in the pre- and post-test calculations found on item #30.
(5) Number and percent of participants not tested and/or not analyzed on item #30.
(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.

Appendix C

BOARD OF EDUCATION OF THE CITY OF NEW YORK

MUSIC FOR THE HANDICAPPED - TITLE VI - FUNCTION NO. 0956612

THE FOLLOWING KEY IS USED IN RATING STUDENTS:

1 = NEVER
2 = SELDOM
3 = SOMETIMES
4 = ALWAYS

PUPIL'S NAME

CLASS (SCHOOL)

DATE

OBJECTIVE NO. I - VOICE CONTROL - TO DEMONSTRATE BREATH CONTROL, DYNAMICS, PITCH MATCHING, SUSTAINING TONES

1 2 3 4 1. The student demonstrates the ability to match pitch (Teacher plays pitch on piano-student sings, teacher plays series of pitches, student sings)

1 2 3 4 2. The student is able to memorize simple songs (i.e. Hot Cross Buns)

1 2 3 4 3. The student is able to sing the lyrics so they can be clearly understood.

1 2 3 4 4. The student is able to express the feeling of the song

1 2 3 4 5. The student is able to vary the dynamic level of the song.

1 2 3 4 6. The student has sufficient breath control to sustain long tones.

OBJECTIVE NO. II - TO DEMONSTRATE ABILITY TO READ SIMPLE RHYTHMIC NOTATION AND MELODIC NOTATION

1 2 3 4 1. The student is able to read and perform a pattern of rhythm lines and rests from the chalkboard.

1 2 3 4 2. The student is able to read a melody from a one line staff and perform it on the Keyboard or Orff instruments.

1 2 3 4 3. The student is able to read accents, ties, and single beats from the chalkboard.

1 2 3 4 4. The student is able to read and perform a two line orchestration of rhythm patterns.

EVALUATION INSTRUMENT - MUSIC FOR THE HANDICAPPED

OBJECTIVE NO. III- TO DEMONSTRATE THE ABILITY TO COMPOSE SIMPLE MELODIES

1 2 3 4 1. The student can compose simple melodies on a one line staff from a given text.

1 2 3 4 2. The student is able to compose a simple rhythmic pattern and notate it on the chalkboard using rhythm lines, rests, accents, ties.

OBJECTIVE NO. IV - TO DEMONSTRATE FACILITY IN PLAYING CLASSROOM PERCUSSION INSTRUMENTS

1 2 3 4 1. The student is able to imitate the pattern of the teachers clapping, snapping, stamping, etc.

1 2 3 4 2. The student is able to maintain a steady beat such as marching, clapping, etc., in time.

1 2 3 4 3. The student is able to demonstrate "stop and go" which is to start when the music starts and stop when the music stops.

1 2 3 4 4. The student demonstrates coordinated ability to play classroom percussion instruments - drum, rhythm sticks, maraccas, clave's etc.

1 2 3 4 5. The student can play "HOT CROSS BUNS" satisfactorily on the Keyboard in correct rhythm.

OBJECTIVE NO. V - TO RECOGNIZE AND IDENTIFY MUSICAL NOTATION

1 2 3 4 1. The student is able to identify melodic notation on a single line staff.

1 2 3 4 2. The student is able to identify rhythmic notation - terms rest, beat, tie, accent.

Appendix D

Staff In-Service Training

Date	Place	Major Emphasis
October 16, 1974	Music Bureau	School climates, preparation of lesson plans, use of equipment and administrative staff relationship.
November 13, 1974 P.M.	P.S. 335	Evaluation procedures, payroll procedures, recorder technique development, discussion on classroom observations.
January 10, 1975 P.M.	P.S. 335	Discussion of classroom observations, Kodaly Hand Signal Technique Solidify Structure of Lesson (Pace) Progress of Evaluation "Music in Our Schools Week"
January 25, 1975	Music Bureau	Preparation for Evaluation Index Card Remarks for Individual Student Breathing Techniques Lesson Plans
March 20, 1975	P.S. 83	Pace - Improvement Keyboard Techniques Evaluation of Observed Lessons
April 16, 1975 P.M.	Music Bureau	Plans for Dissemination Conference Post-testing Procedures
May 14, 1975 P.M.	P.S. 335	Plans for Parent Workshops Final Results of Testing
June 14, 1975 P.M.	P.S. 335	Plans for 1975-76 School Year Evaluation Results Staff Self-Evaluation